ABSTRACT

A medical location system includes a medical device having a body and a position sensor at a portion of the body. The position sensor has a core made of a Wiegand effect material and a winding circumferentially positioned around the core. The position sensor provides signals that are used to determine temperature at the position sensor and location information of the portion of the body of the medical device. A signal processor is coupled to receive the signals from the position sensor and the signal processor determines the temperature at the position sensor and location information of the portion of the body of the medical device based on the signals received from the position sensor.